

Work Order ID 130168

Wednesday, February 25, 2015 12:44:00 PM

130168

Page 1

Item ID: 647.3903

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Deflector Assembly

Start Date: 2/26/15 Start Qty: 1.00

1 2
1

Cust Item ID:

Required Date: 3/02/15 Req'd Qty: 1.00

Customer:

Reference:

Approvals:

Process Plan:

Date: 15-2-25

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
647.3900	C (ECN)

110	Pick Kit	0.00							DAS 41 9-89
110						2			15-3-4
Packaging	Memo	0.00							
Packaging									

120		0.00							DAS 41 9-89
120						2			15-3-4
Small Fab	Memo	0.00							
Small Fab	Assemble as per dwg and apply loctite 598 on all faying surfaces per note .								
	A/R RTV LOCTITE 598: 125637								
	exp. date: 5/15								

130	QC5- Inspect part completeness to step on W/O	0.00							DAS 38 9-89
130						(2)			
QC	Memo	0.00							
Quality Control									

MAR 04 2015

647.3903
B130168
REV-C

SHIP March 4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Work Order ID 130168

130168

Page 2

Wednesday, February 25, 2015 12:44:00 PM

Item ID: 647.3903 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Deflector Assembly
Start Date: 2/26/15 Start Qty: 1.00 *1* Cust Item ID:
Required Date: 3/02/15 Req'd Qty: 1.00 *1* Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Identify as per dwg & Stock Location <u>CCES9</u>	0.00							
140									
Packaging	Memo	0.00							
Packaging	***IDENTIFY AS PER IAW MPP-120***								
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	Memo	0.00							
Quality Control									

2
MAR 05 2015
DMS
05
8:39

MCS 15-03-05

15-3-5

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence
		☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge
		☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other

Picklist Print

Wednesday, February 25, 2015 12:44:14 PM

Page 1

Work Order ID: 130168

130168

Parent Item: 647.3903

647.3903

Parent Item Name: Deflector Assembly

Start Date: 2/26/15

Required Date: 3/02/15

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 14.07.21 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

647.3915		Manufactured	No				Each	28.0000		1		DAS 41 9-89	15-3-4
647.3915									**				
Deflector													

Location	Loc Qty	Loc Code
CCK056	28	
120739	12	
121791	16	

647.3916		Manufactured	No				Each	3.0000		1		DAS 41 9-89	15-3-4
647.3916									**				
Deflector													

Location	Loc Qty	Loc Code
MF	3	
121376	3	

647.3917		Manufactured	No				Each	0.0000		2		DAS 41 9-89	15-3-4
647.3917									**				
Doubler													

CR3213-6-9		Purchased	No				Each	88.0000		8		DAS 41 9-89	15-3-4
CR3213-6-9									**				
Cherry Rivet													

Location	Loc Qty	Loc Code
ST318	88	
m131049	88	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
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Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04556

SHEET 1 OF 1

DWG NO. 647.3900

REV: C

PREPARED BY D. MEJIA

DATE: 06/10/2014

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: DEFLECTORS

APPROVED BY: ENGR *[Signature]*

MFG *[Signature]*

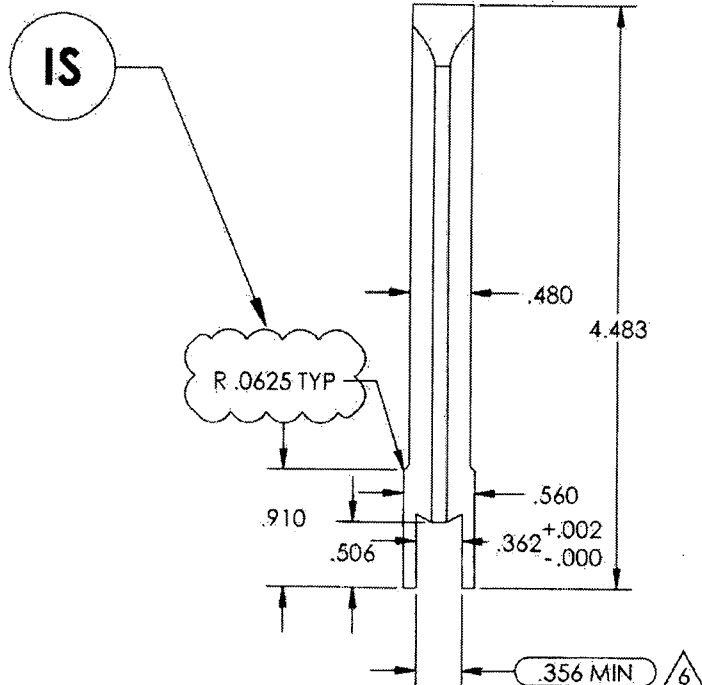
QC *[Signature]*

EFF. NEXT ORDER

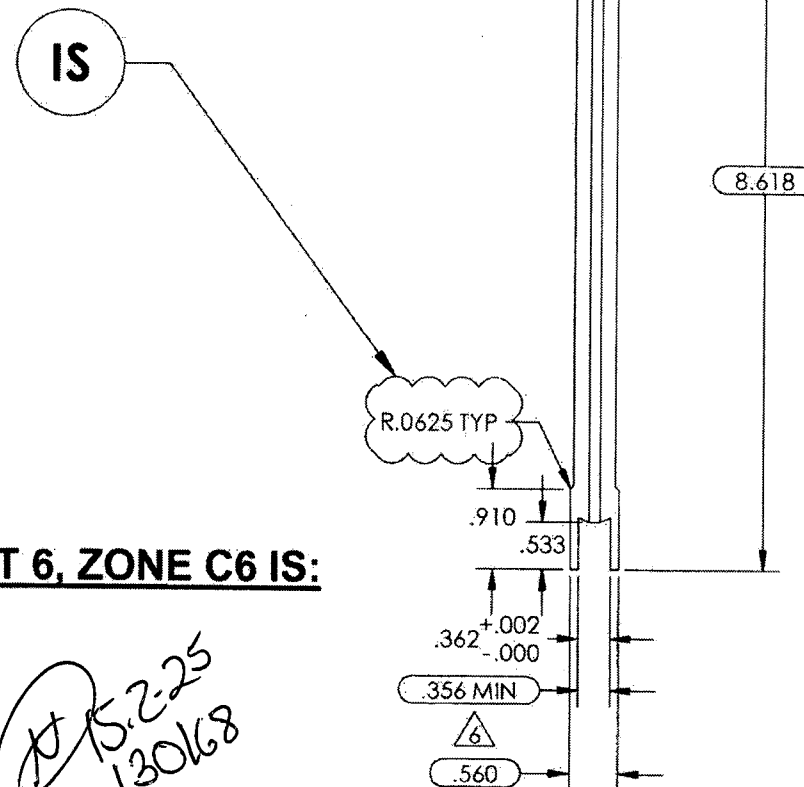
TRANSACTION CODES (TC):
 A-ADD
 R-REVISE
 C-CREATE
 D-DELETE

REASON: DIMENSION CHANGE

ECR: D-14-04



SHEET 5, ZONE C6 IS:



SHEET 6, ZONE C6 IS:

[Handwritten signature]
 15.2.25
 130168

DOCUMENTS EFFECTED:

☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☐ BOM

CHANGE CATEGORY

☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED

☐ YES ☒ NO

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NOTES:

1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.

2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;

3. DEBURR AND BREAK ALL SHARP EDGES.

4. IDENTIFY IAW MPP-120.

5 APPLY F/N 3 AS REQUIRED TO ALL FAYING SURFACES OF F/N 6, 7 & 8 UPON ASSY.

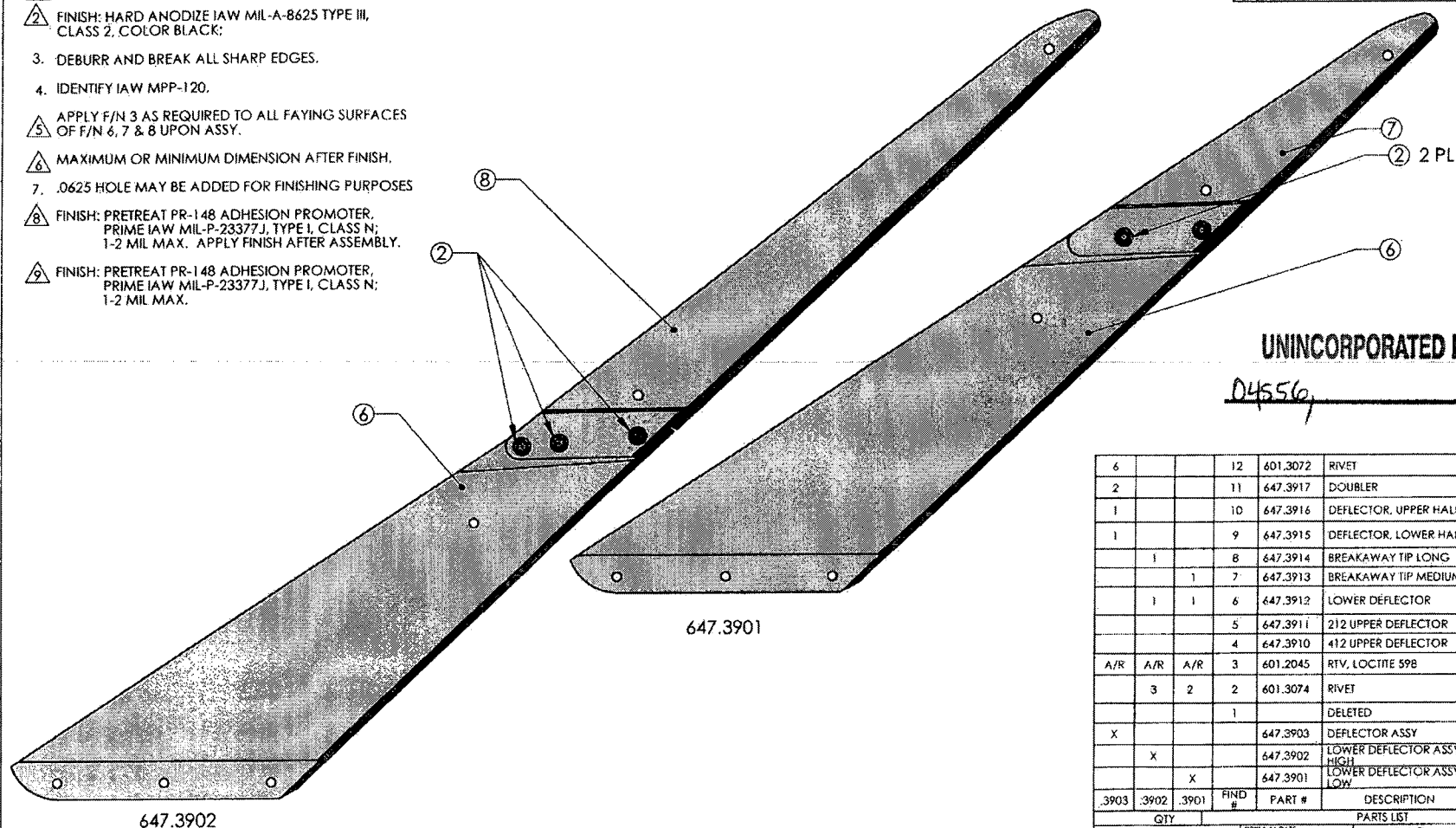
6 MAXIMUM OR MINIMUM DIMENSION AFTER FINISH.

7. .0625 HOLE MAY BE ADDED FOR FINISHING PURPOSES

8 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX. APPLY FINISH AFTER ASSEMBLY.

9 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX.

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE RELEASE-PRI		INC
2	INITIAL RELEASE	09/10/09	P. BRAVO
3	INCORPORATED ECN 0284 0339 & 0345	07/24/12	P. BRAVO
4	INCORPORATED ECN 0403	08/23/15	P. BRAVO
5	INCORPORATED ECN 0403, 0405 & 0430	11/18/19	P. BRAVO



UNINCORPORATED ECN(s)

04556

6			12	601.3072	RIVET	CR3213-6-9	
2			11	647.3917	DOUBLER		
1			10	647.3916	DEFLECTOR, UPPER HALF	△	△
1			9	647.3915	DEFLECTOR, LOWER HALF	△	△
	1		8	647.3914	BREAKAWAY TIP LONG	△	△△
		1	7	647.3913	BREAKAWAY TIP MEDIUM	△	△△
	1	1	6	647.3912	LOWER DEFLECTOR	△	△△
			5	647.3911	212 UPPER DEFLECTOR	△	△△
			4	647.3910	412 UPPER DEFLECTOR	△	△△
A/R	A/R	A/R	3	601.2045	RTV, LOCTITE 598		△
	3	2	2	601.3074	RIVET	MS20473AD 6-12	
			1		DELETED		
X				647.3903	DEFLECTOR ASSY		△
	X			647.3902	LOWER DEFLECTOR ASSY HIGH		
		X		647.3901	LOWER DEFLECTOR ASSY LOW		
.3903	.3902	.3901	FIND #	PART #	DESCRIPTION	MAT'L	SPEC
QTY				PARTS LIST			
NEXT ASSY (S)				APICAL INDUSTRIES			
647.3800				2808 TEMPLE HEIGHTS DR.			
				OCEANSIDE, CA. 92056-3512 (760)724-5300			
				DEFLECTORS			
				SHEET 1 OF 12			

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.125 X 45.0° TYP

SECTION B-B

Ø.177 THRU 3PL

.266 X 17.9°

.045

.603

R.915

4.220±.002

DETAIL A

.923

2.110±.002

R.279

R3.406

15.896

15.304

15.046

B

B

6.446

.312

0

18.502

18.127

35.8°

10.702

8.599

6.253

1.700

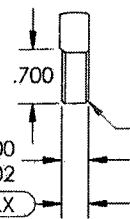
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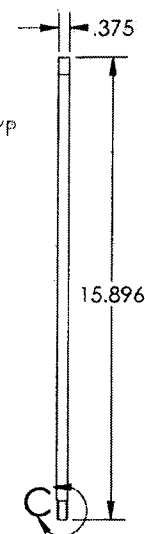
Ø.189

40.2°

A



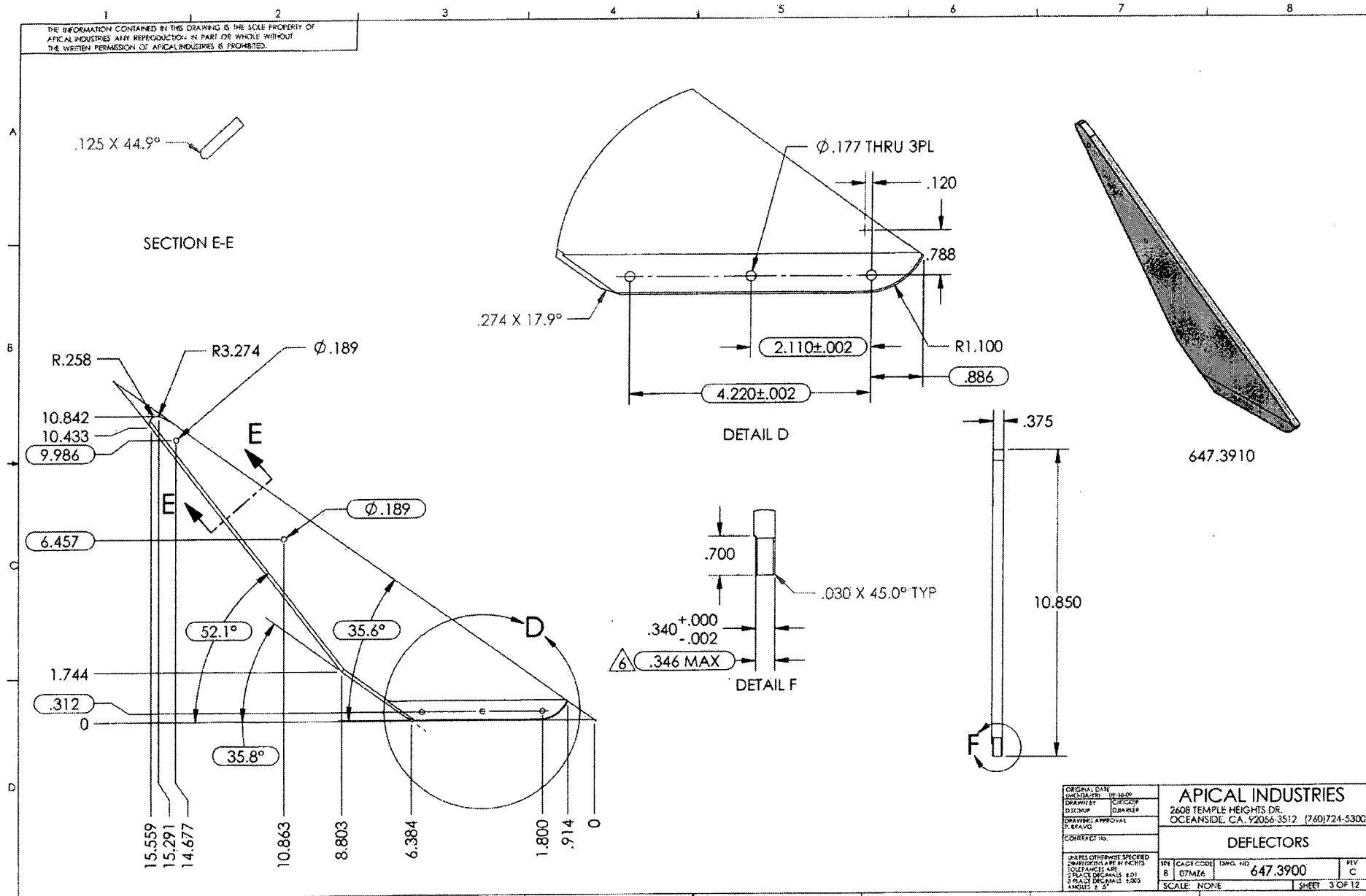
DETAIL C



647.3911

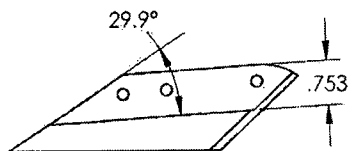
ORIGINAL DATE: 06/15/00 DESIGNED BY: J. SCHULZ DRAWING APPROVAL: J. SCHULZ CHECKED BY: J. SCHULZ COUNTER: 1		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ±.01 DECIMALS ±.005 ANGLES ±.5°		SEE: CAICA CODE B 07/12/26	DWG. NO: 647.3900
SCALE: NONE		REV: C	SHEET: 2 OF 12

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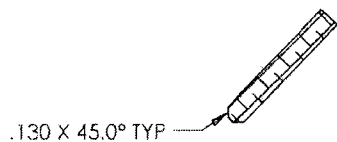


ORIGINAL DATE	10/15/80	APICAL INDUSTRIES
DRAWN BY	DEKAP	2608 TEMPLE HEIGHTS DR.
CHECKED BY	DEKAP	OCEANSIDE, CA. 92056-3512 (760)724-5300
DRAWING APPROVAL		
CONTRACT NO.		
UNLESS OTHERWISE SPECIFIED		
DIMENSIONS ARE IN INCHES		
TOLERANCES ARE:		
2 PLACE DECIMALS $\pm .01$		
3 PLACE DECIMALS $\pm .005$		
ANGLES $\pm .5^\circ$		
REV	1	DATE
B	07/12/86	647.3900
SCALE	NONE	SHEET 3 OF 12

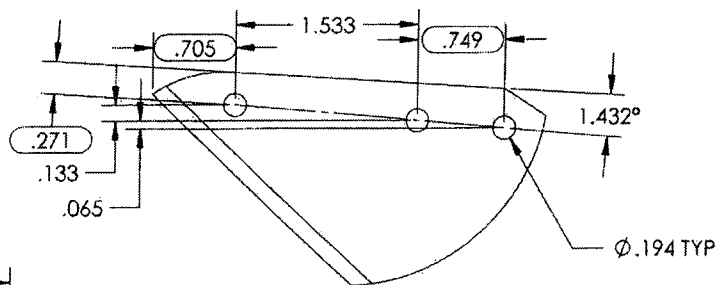
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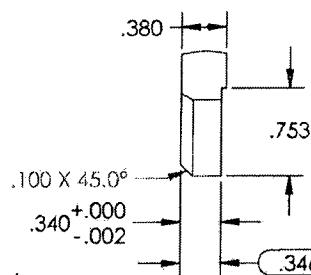
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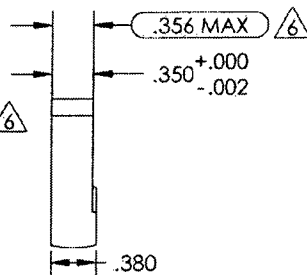
SECTION M-M



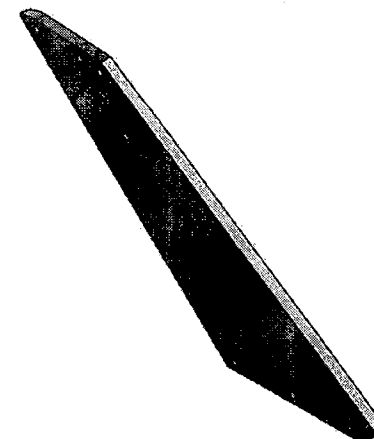
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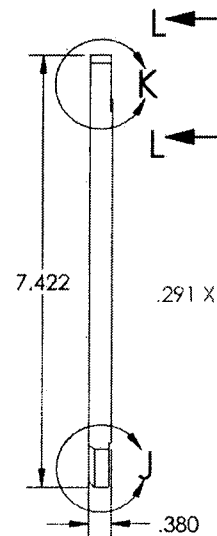
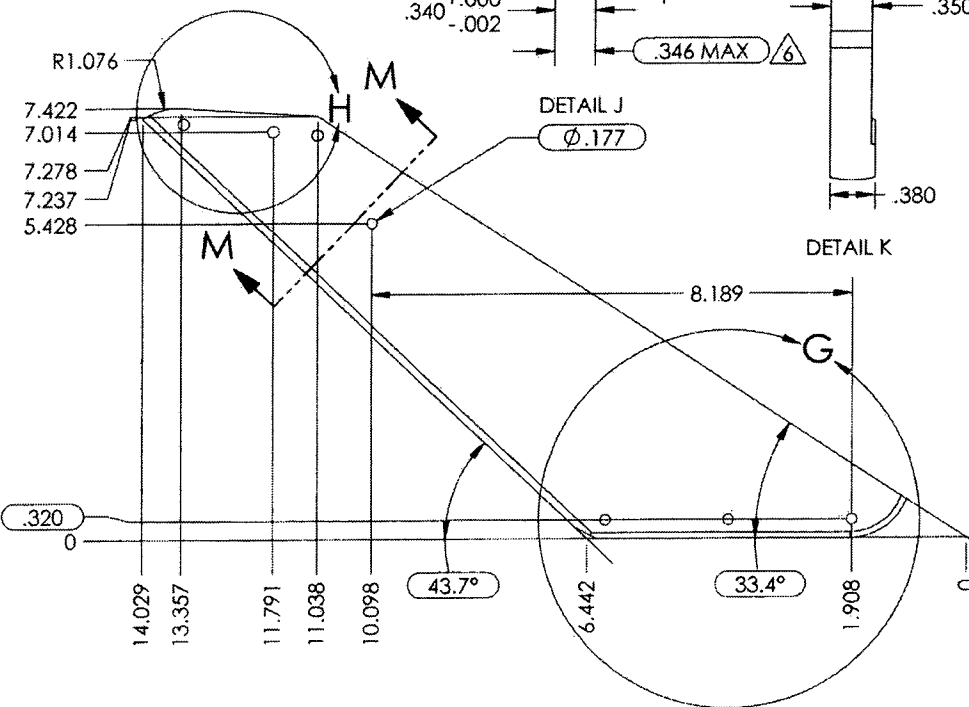
DETAIL J



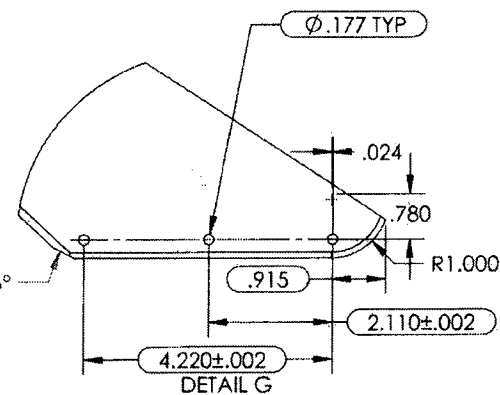
DETAIL K



647.3912



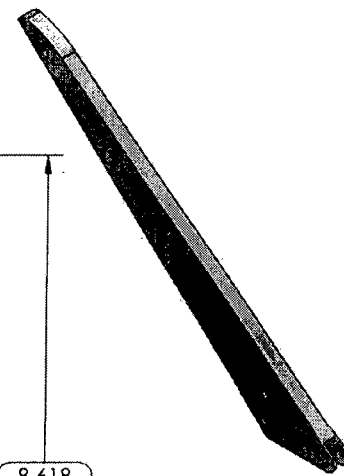
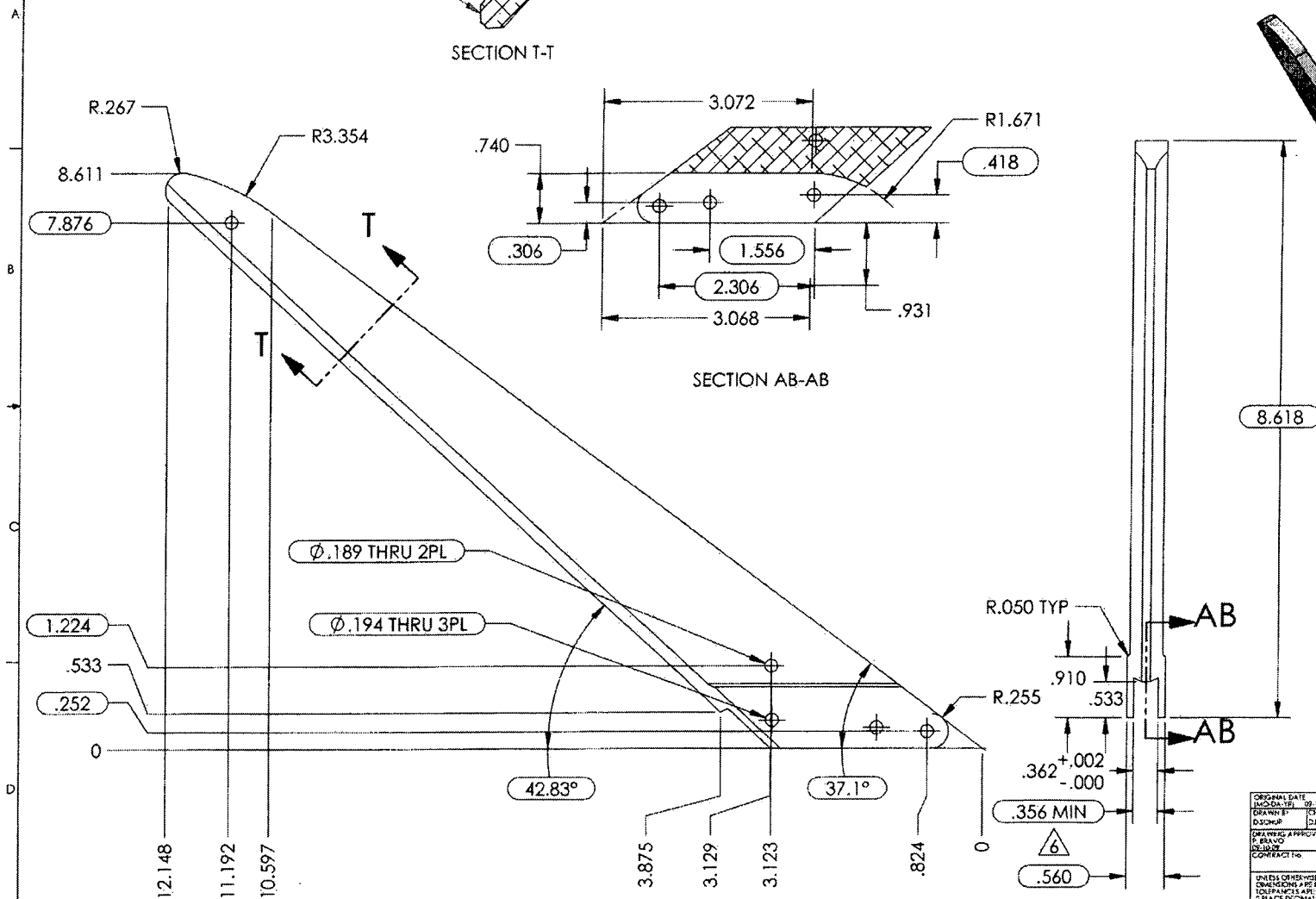
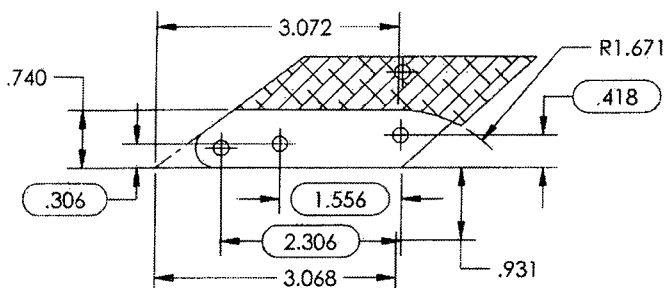
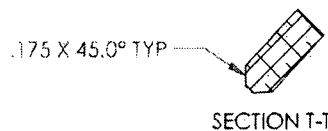
DETAIL G



ORIGINAL DATE 10/24/10 BY: JDO		APICAL INDUSTRIES	
DRAWN BY: JDO		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: JDO		OCEANSIDE, CA 92056-3512 (760)724-5300	
DRAWING APPROVAL P. B. V. G.		DEFLECTORS	
CONTRACT NO.		647.3900	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SCALE: NONE	SHEET 4 OF 12

SHEET 3 OF 1

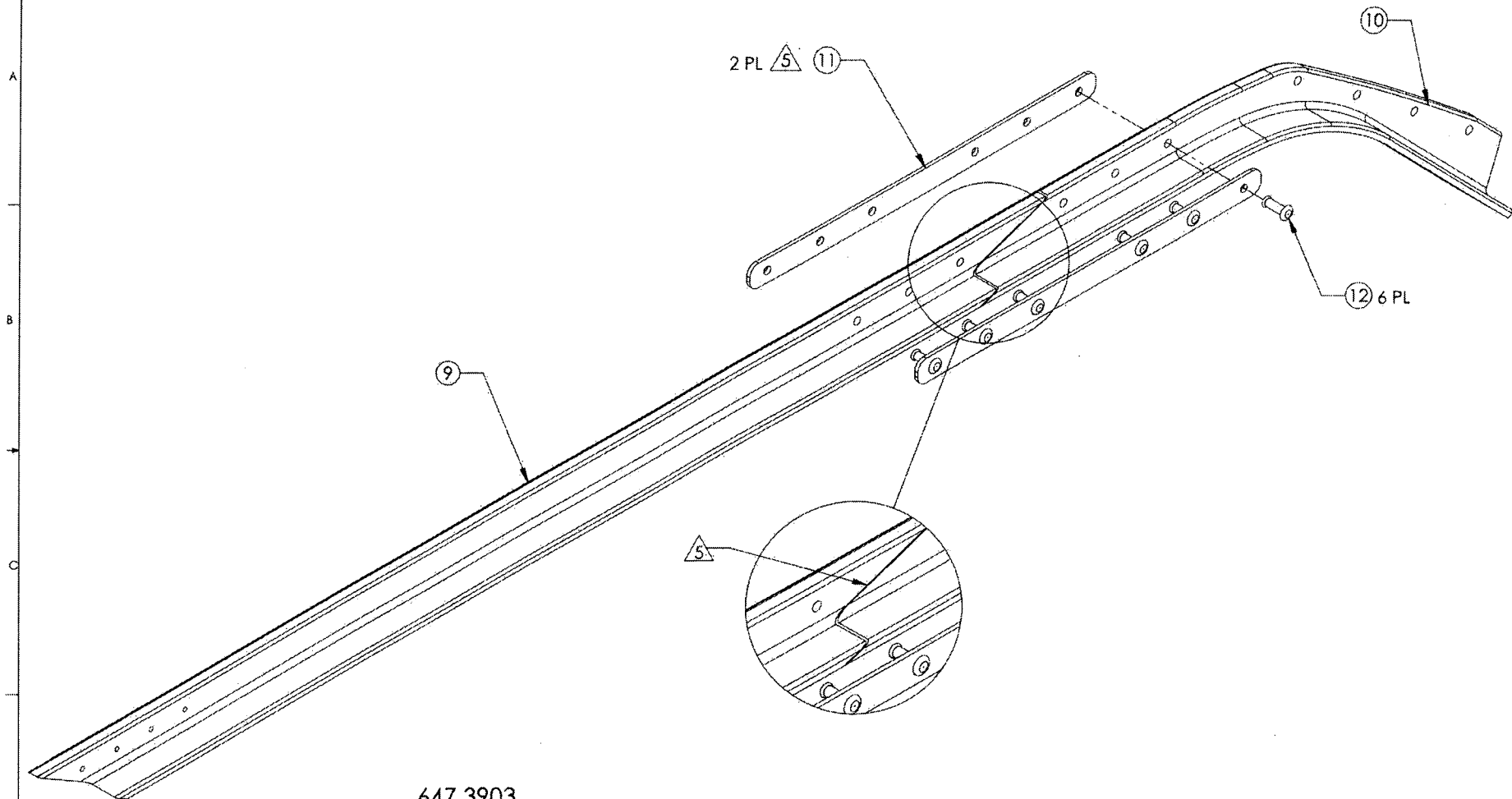
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647.3914

ORIGINAL DATE 08/04/01		APICAL INDUSTRIES	
DESIGNED BY D. BARNES		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL D. BARNES		DEFLECTORS	
CONTRACT NO.		SHEET B	REV. C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS .01 3 PLACE DECIMALS .005 ANGLES .5°		DATE CODED 07/04/06	QTY. NO. 647.3900
		SCALE NONE	SHEET 6 OF 12

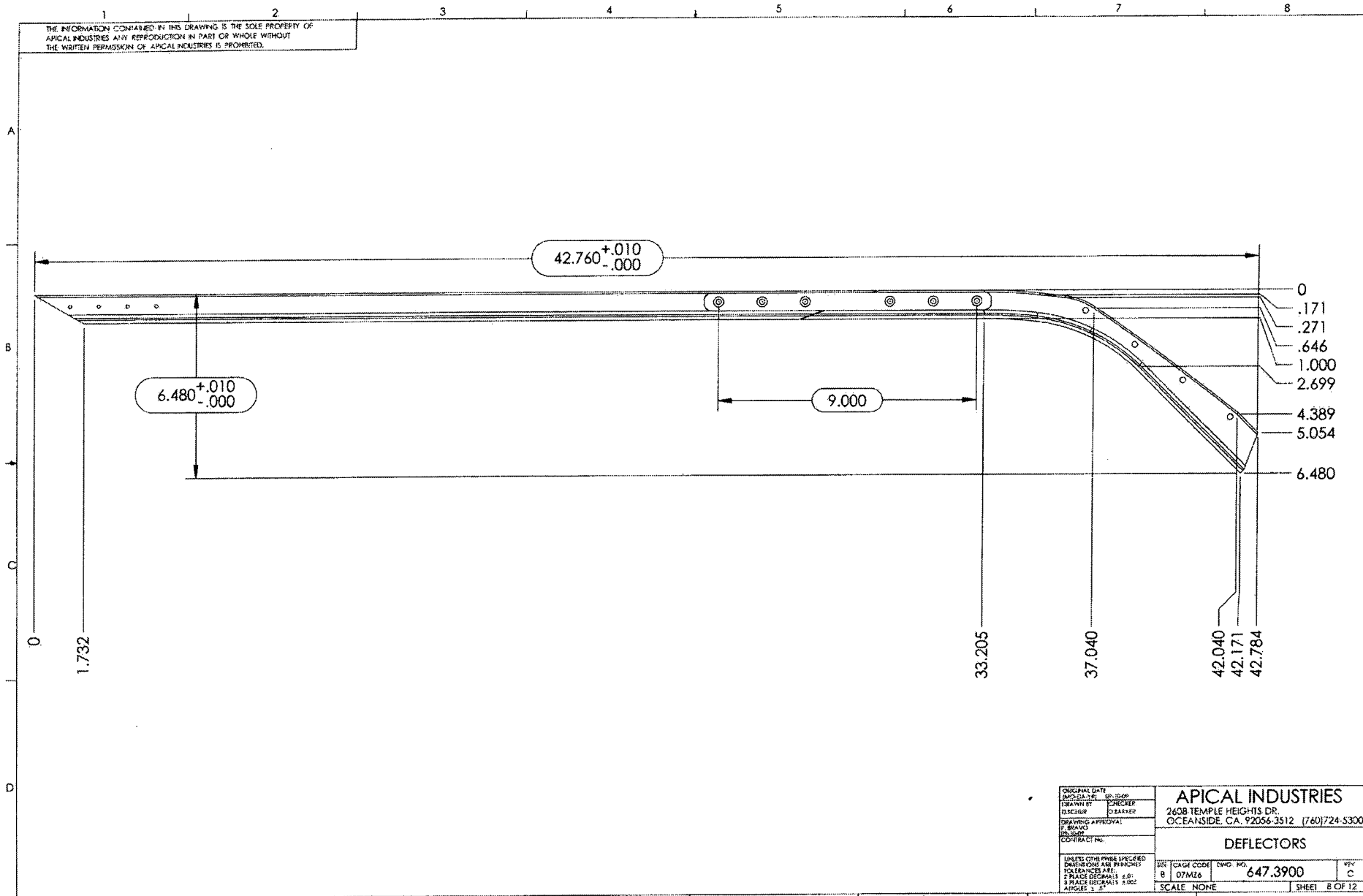
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647.3903

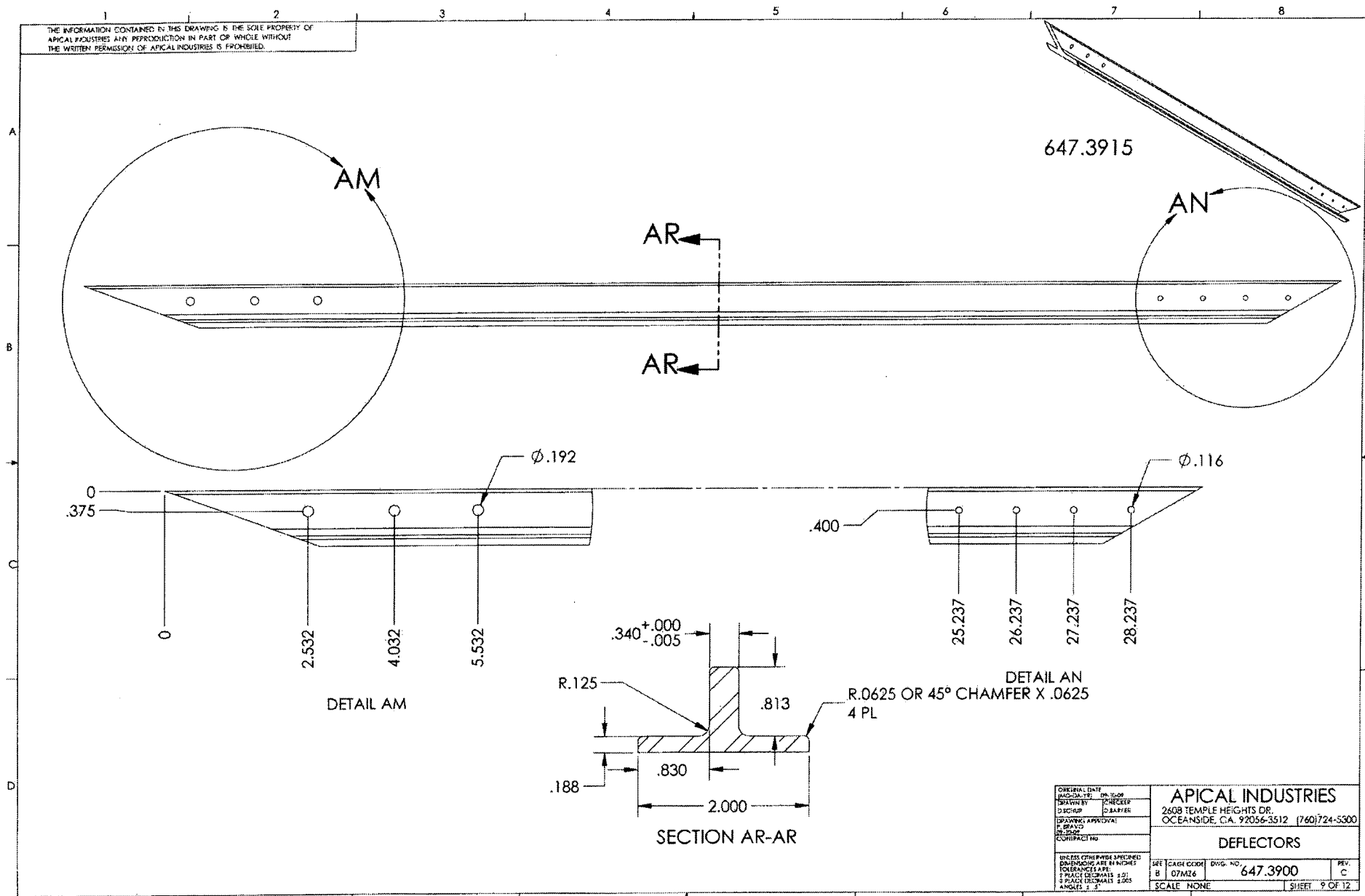
ORIGINAL DATE		APICAL INDUSTRIES	
DESIGNED BY	DESIGNED BY	2608 TEMPLE HEIGHTS DR.	
DRAWN BY	DRAWN BY	OCEANSIDE, CA. 92056-3512 (760) 724-5300	
CHECKED BY	CHECKED BY	DEFLECTORS	
ENGINEERING APPROVAL	ENGINEERING APPROVAL		
CONTRACT NO.	CONTRACT NO.		
UNLESS OTHERWISE SPECIFIED		REV. 1	REV. 2
DIMENSIONS ARE IN INCHES		8	07M26
TOLERANCES ARE:		DWG. NO. 647.3900	
2 PLACE DECIMALS ±0.01		REV. C	
3 PLACE DECIMALS ±0.005		SCALE NONE	
ANGLES ± 5°		SHEET 7 OF 12	

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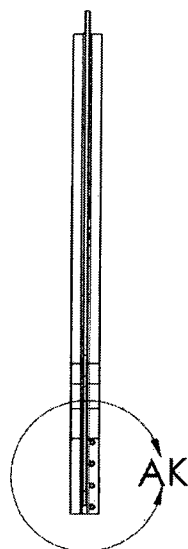
ORIGINAL DATE		APICAL INDUSTRIES	
DRAWN BY: DISCHUR		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: D. BARKER		OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL		DEFLECTORS	
BY: [Signature]		CONTRACT NO.	
LIMITS OF WORK SPECIFIED		SHEET 8 OF 12	
DIMENSIONS ARE IN INCHES		SCALE: NONE	
TOLERANCES ARE:		DWG. NO. 647.3900	
1 PLACE DECIMALS ±.01		REV. C	
2 PLACE DECIMALS ±.002			
3 PLACE DECIMALS ±.0002			
ANGLES: 1°			

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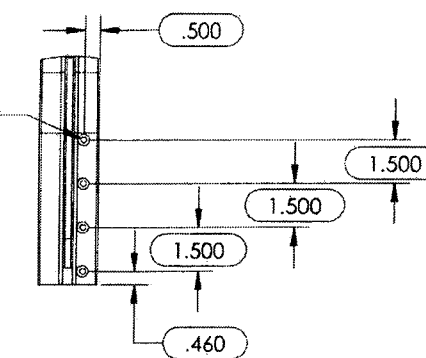


ORIGINAL DATE 10-01-79	DATE 01-15-08	APICAL INDUSTRIES
DRAWN BY D. SCHUP	CHECKED BY D. BAFFER	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300
DRAWING APPROVAL H. BAFFER		DEFLECTORS
CONTRACT NO.		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°	SIZE B	DWG. NO. 647.3900
	SCALE NONE	REV. C
		SHEET 9 OF 12

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4X $\phi .196 \pm .010$ THRU ALL
 $\checkmark \phi .385 \pm .020 \times 100^\circ \pm 1.000^\circ$

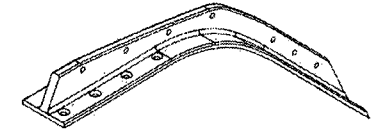


DETAIL AK

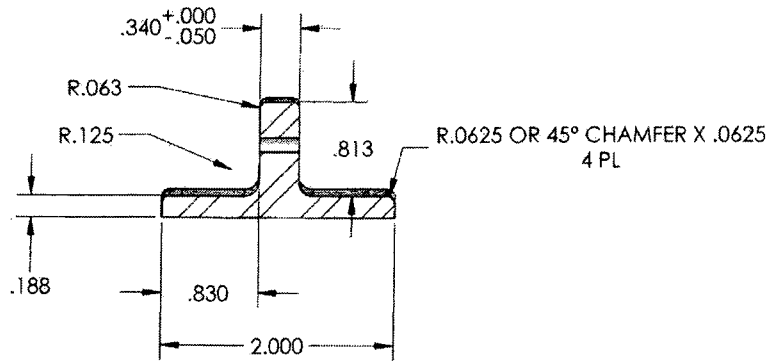
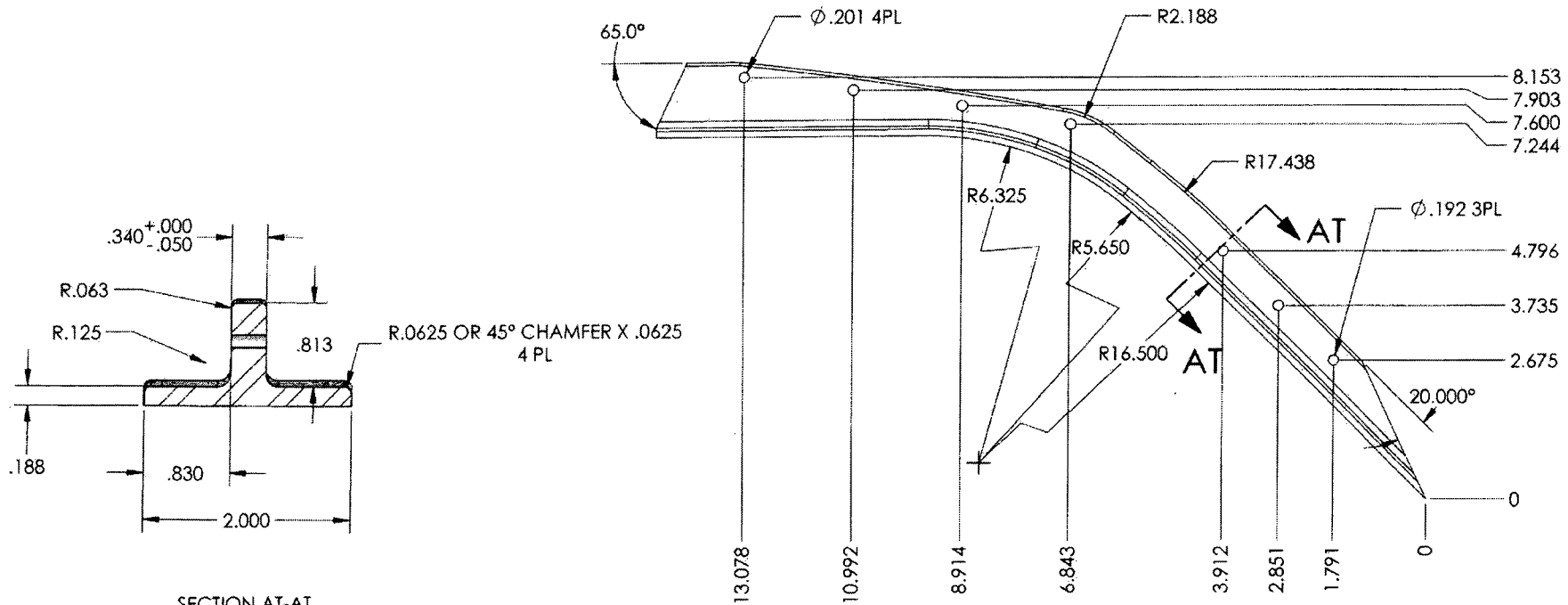
647.3915

ORIGINAL DATE: 06/04/98 DRAWN BY: J. SCHMIDT CHECKED BY: J. SCHMIDT DRAWING APPROVAL: J. SCHMIDT CONTRACT NO.		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ARE 2 PLACE DECIMALS ANGLES ARE 1 PLACE DECIMALS		DEFLECTORS	
SHEET	CAGE CODE	QTY. IN	REV.
B	D7M66	647.3900	C
SCALE: NONE		SHEET 10 OF 12	

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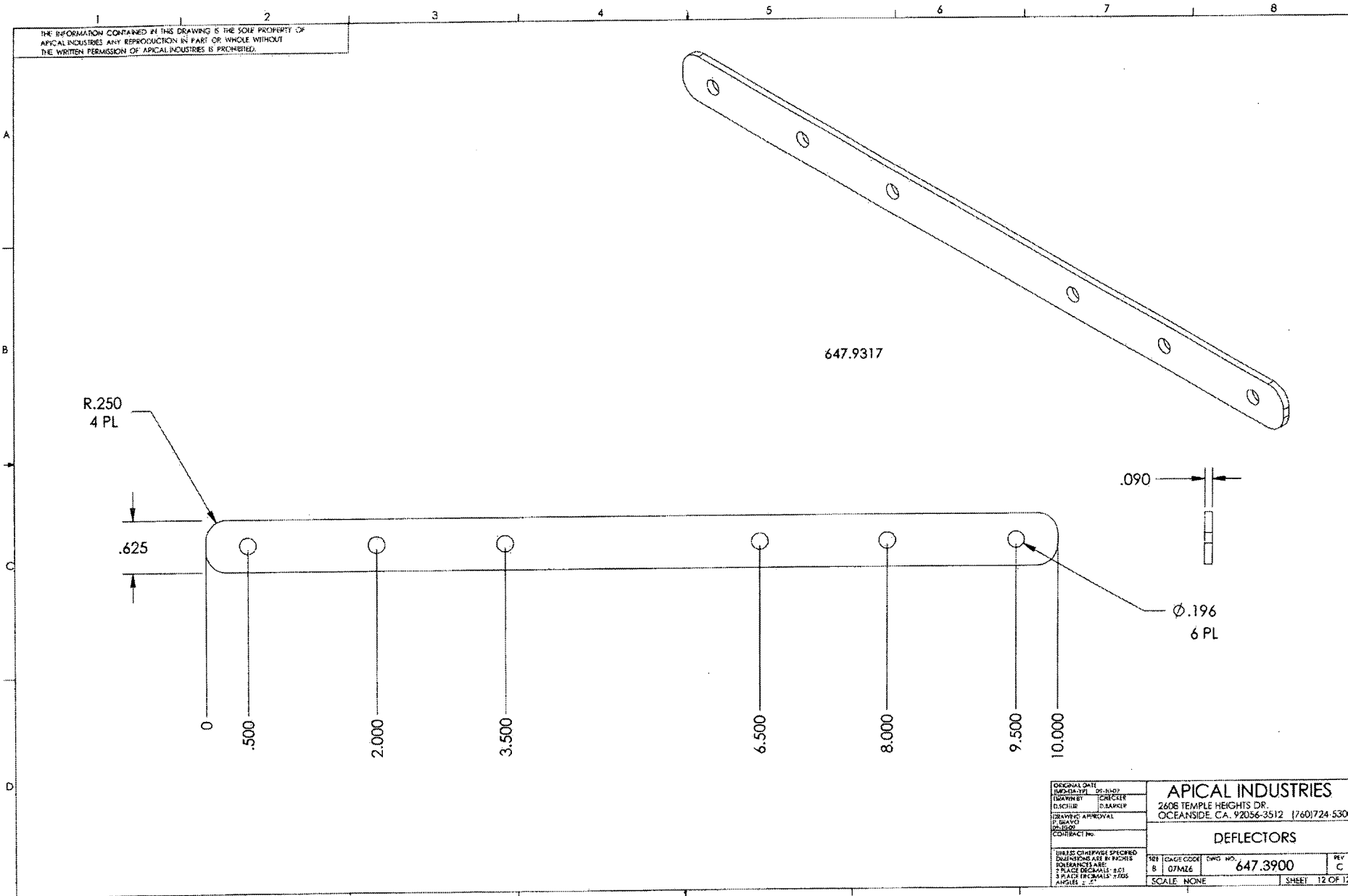
647.3916



SECTION AT-AT

OPTIONAL DATA (NODIMENSIONAL) DRAWN BY: J. SCHUBERT CHECKED BY: D. BARKER DRAWING APPROVAL: P. BRADY DATE: 02/02/01 COMMENTS:		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS (DECIMALS) 1 PLACE DECIMAL: ±.015 2 PLACE DECIMAL: ±.005 ANGLES: ±.5°		DEFLECTORS SET: 647.3900 DWG NO.: 647.3900 SCALE: NONE SHEET: 11 OF 12	

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ORIGINAL DATE		APICAL INDUSTRIES	
DESIGNED BY	DATE	2606 TEMPLE HEIGHTS DR.	
DRAWN BY	CHECKED	OCEANSIDE, CA. 92056-3512 (760)724-5300	
DESIGNED BY	DATE	DEFLECTORS	
DRAWING APPROVAL	DATE	SHEET 8 OF 12	
CONTRACT NO.	DATE	DWG. NO. 647.3900	
UNLESS OTHERWISE SPECIFIED		SCALE NONE	
DIMENSIONS ARE IN INCHES		SHEET 12 OF 12	
TOLERANCES ARE		REV C	
2 PLACE DECIMALS ±.01			
3 PLACE DECIMALS ±.005			
ANGLES ±.5°			